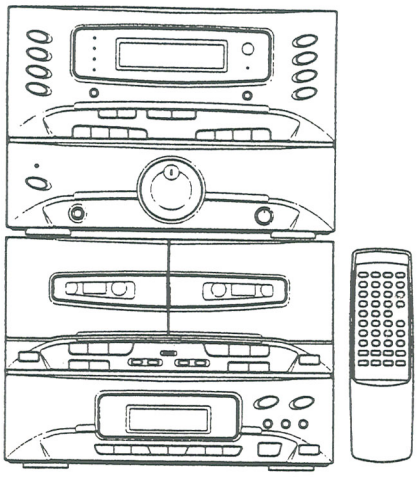
UHER *Reference 2000*

AM/FM STEREO RECEIVER
CASSETTE PLAYER/RECORDER
3-DISC COMPACT DISC CHANGER



SPECIFICATIONS

Power Source	230V/50Hz
Power Comsumption	700 Watts
Output Power	120W x2 (at 0.9% THD)

Tuner Section

Frequency Range	AM: 531-1620 kHz FM: 87.5-108 MHz
Intermediate Frequency	AM: 450 kHz FM: 12.7 MHz
Sensitivity	AM: 900 uV/M (at 1MHz) FM: 10 uV (at 98MHz)
Multiplex Separation	30 dB

Cassette Section

Tape Speed	1-7/8 IPS (4.75 P.S.)
Frequency Response	63 Hz - 12.5 kHz
Wow & Flutter	0.2% WRMS

Amplifier Section

Total Harmonic Distortion (1 kHz)	0.1%
Signal To Noise Ratio	70 dB
Output Power (at 0.9% THD)	120W x 2

Compact Disc Player Section

Channel Separation (1 kHz)	50 dB
Total Harmonic Distortion	0.1%
Signal To Noise Ratio	65 dB

Dimensions	W= 279mm (11") H=394mm (15-1/2") D= 311mm (12-1/4")
Weight	14.3 kgs (31.46 lbs)

SERVICE PUBLICATION

Note All the specifications and features are subject to change without notice

CD Adjustments

The following steps should be performed before attempting adjustments in the CD section.

1. Remove the truntable by sliding the Guide Plate outward. (See Fig. 9)
2. Disassemble the Base Cover by removing 2 screws. (See Fig. 9)

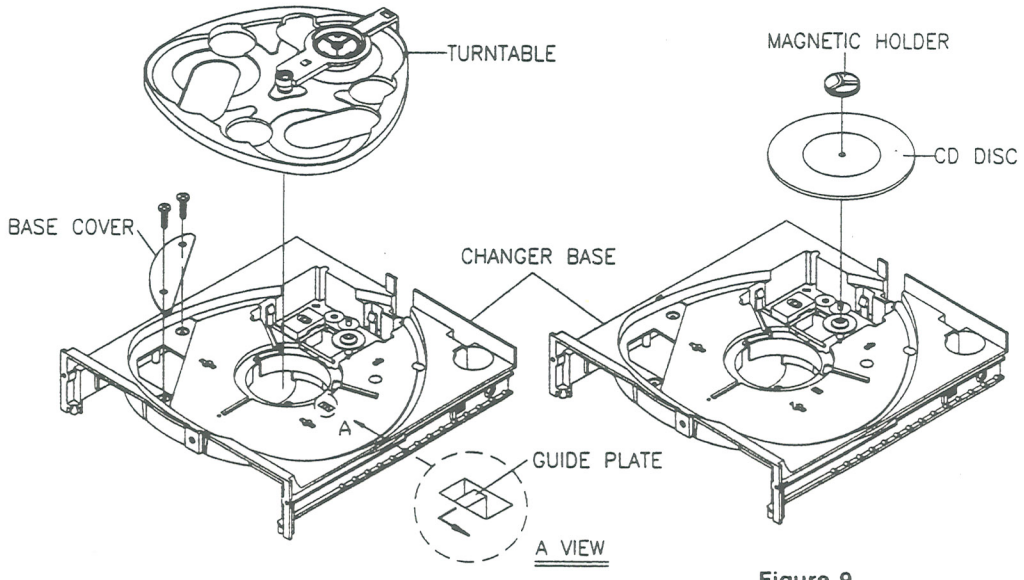


Figure 9

CAUTION:

The laser beam may always be active when the turntable is removed.
Use of controls for adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
The compact disc player should not be adjusted or repaired by anyone except properly qualified service personnel.

RF ADJUSTMENT

1. Connect CN08 to the power supply, and CD player in stop mode.
2. Connect the DC meter to CN10-.
3. Adjust VR01, for a reading of 0V±20mV. (See Fig. 10)

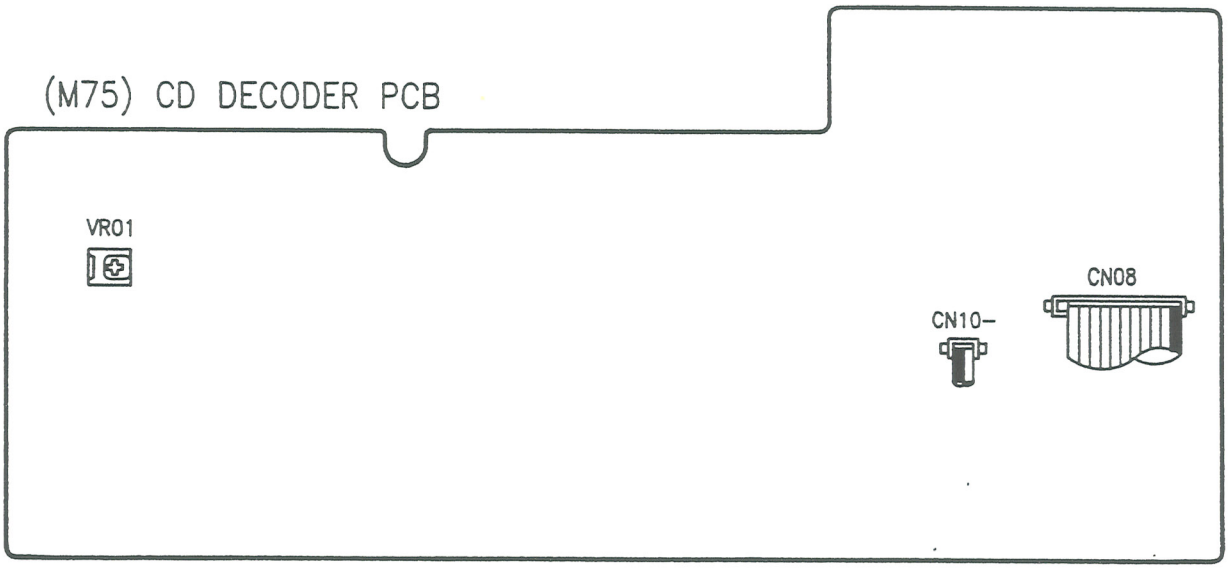
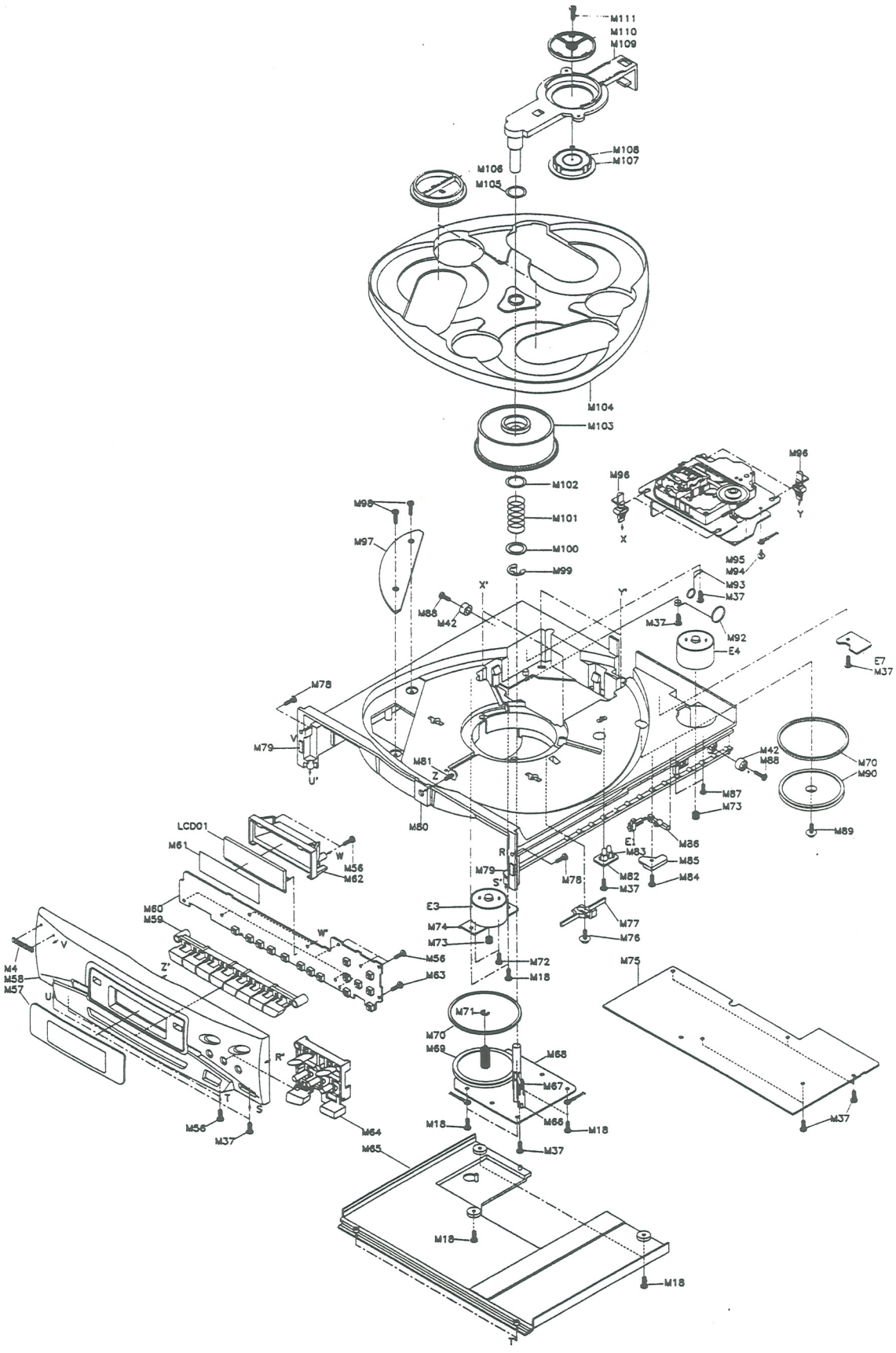
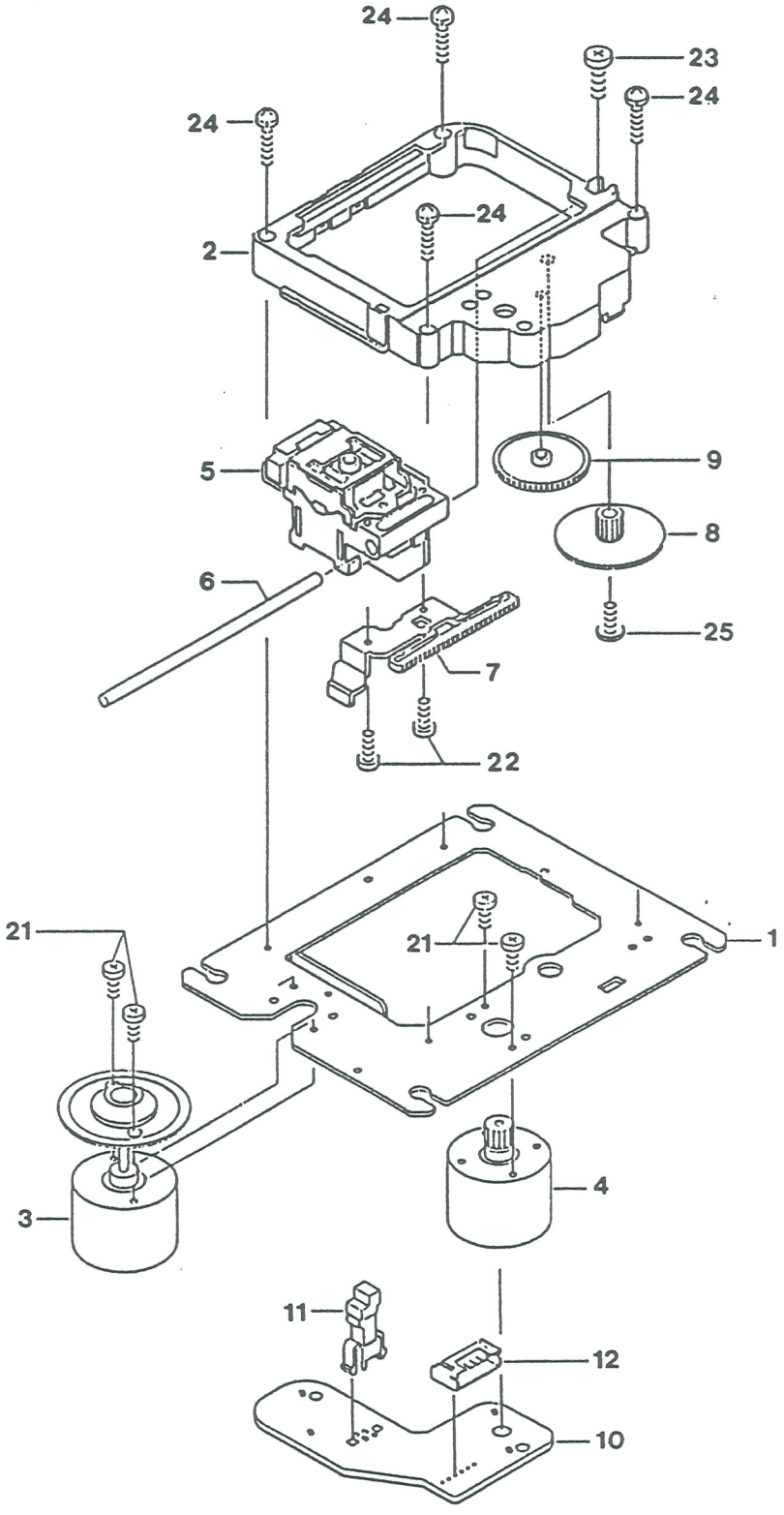


Figure 10

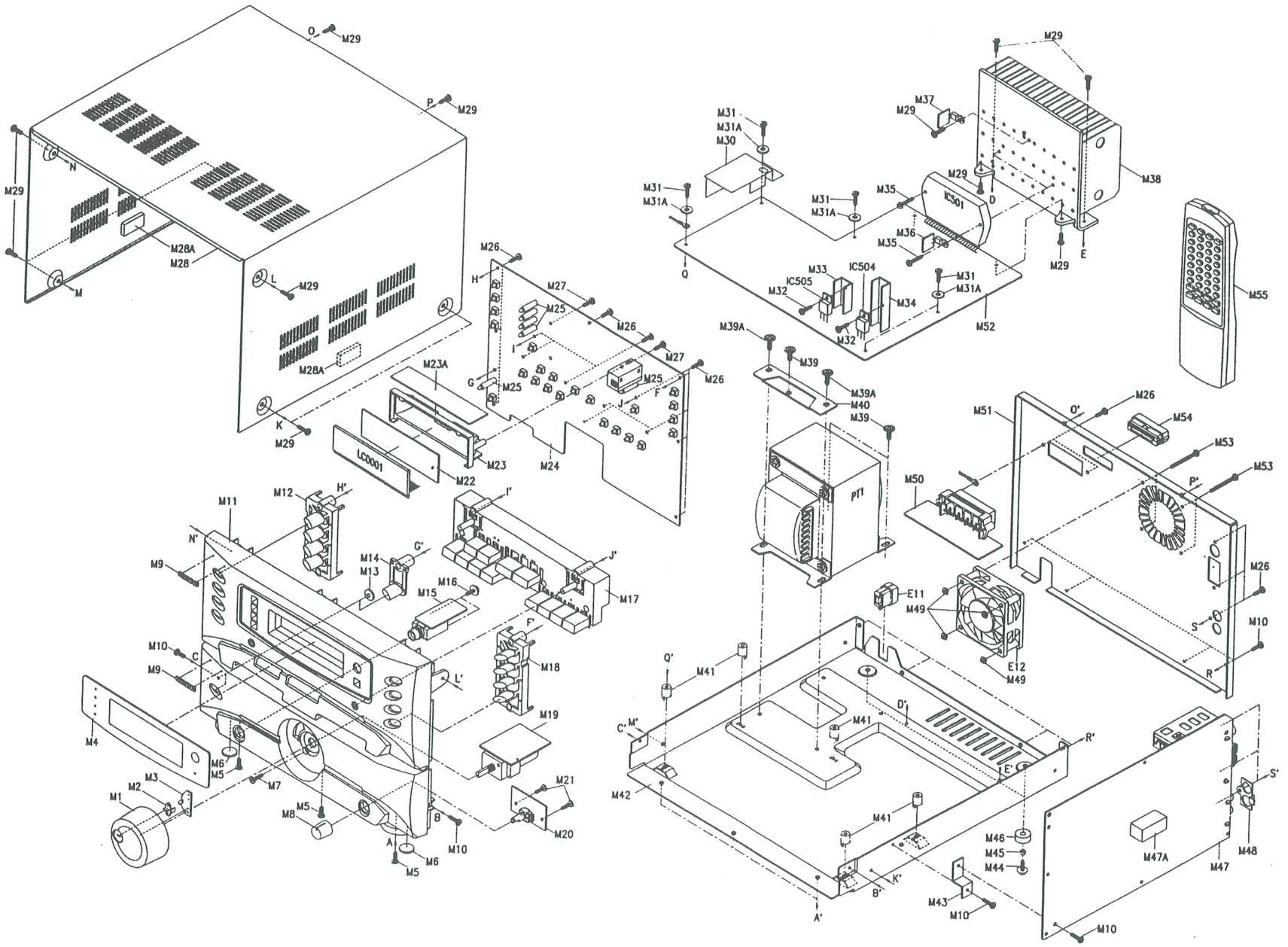
Mechanical Exploded View – CD



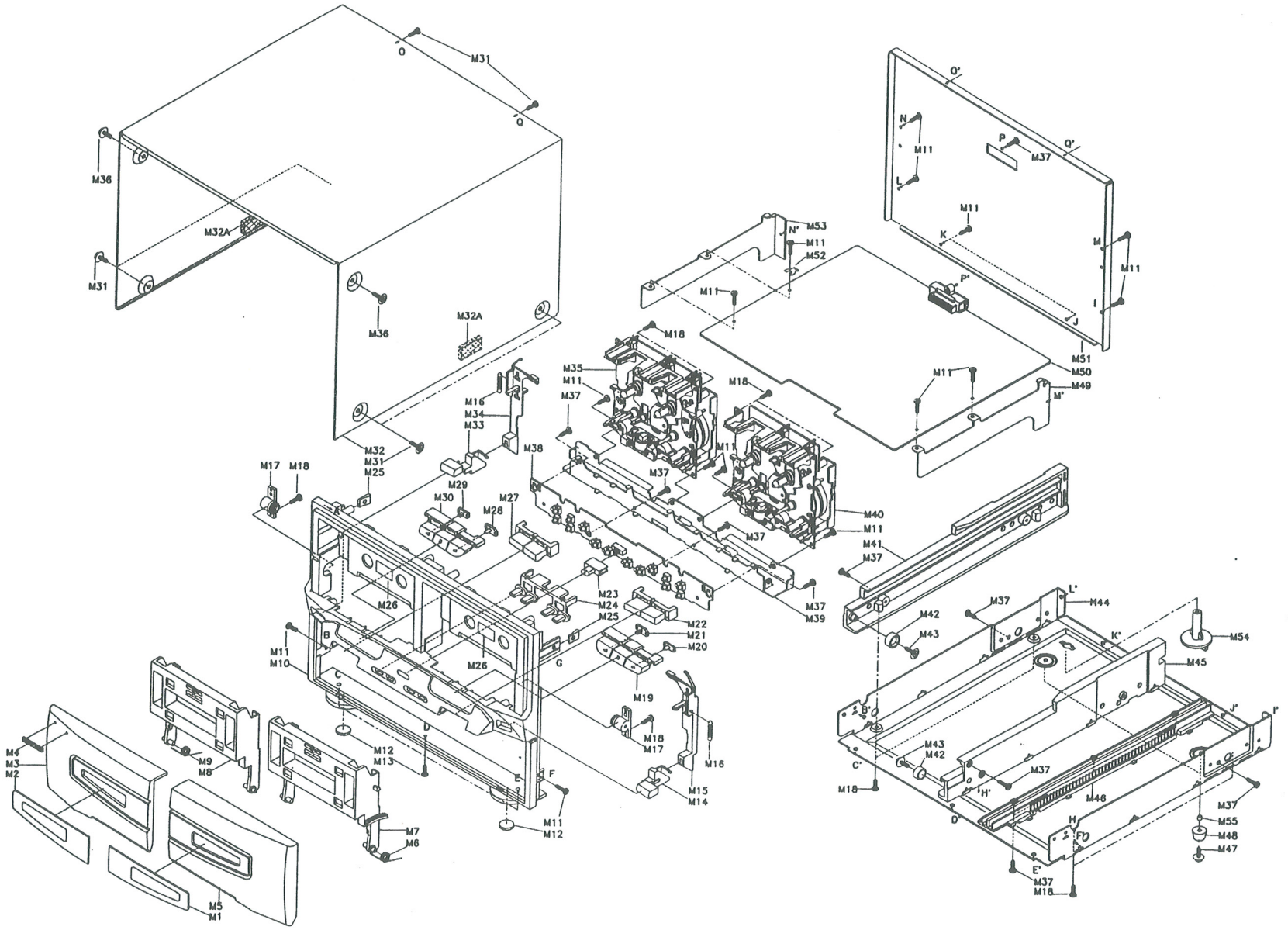
CD Deck Exploded View

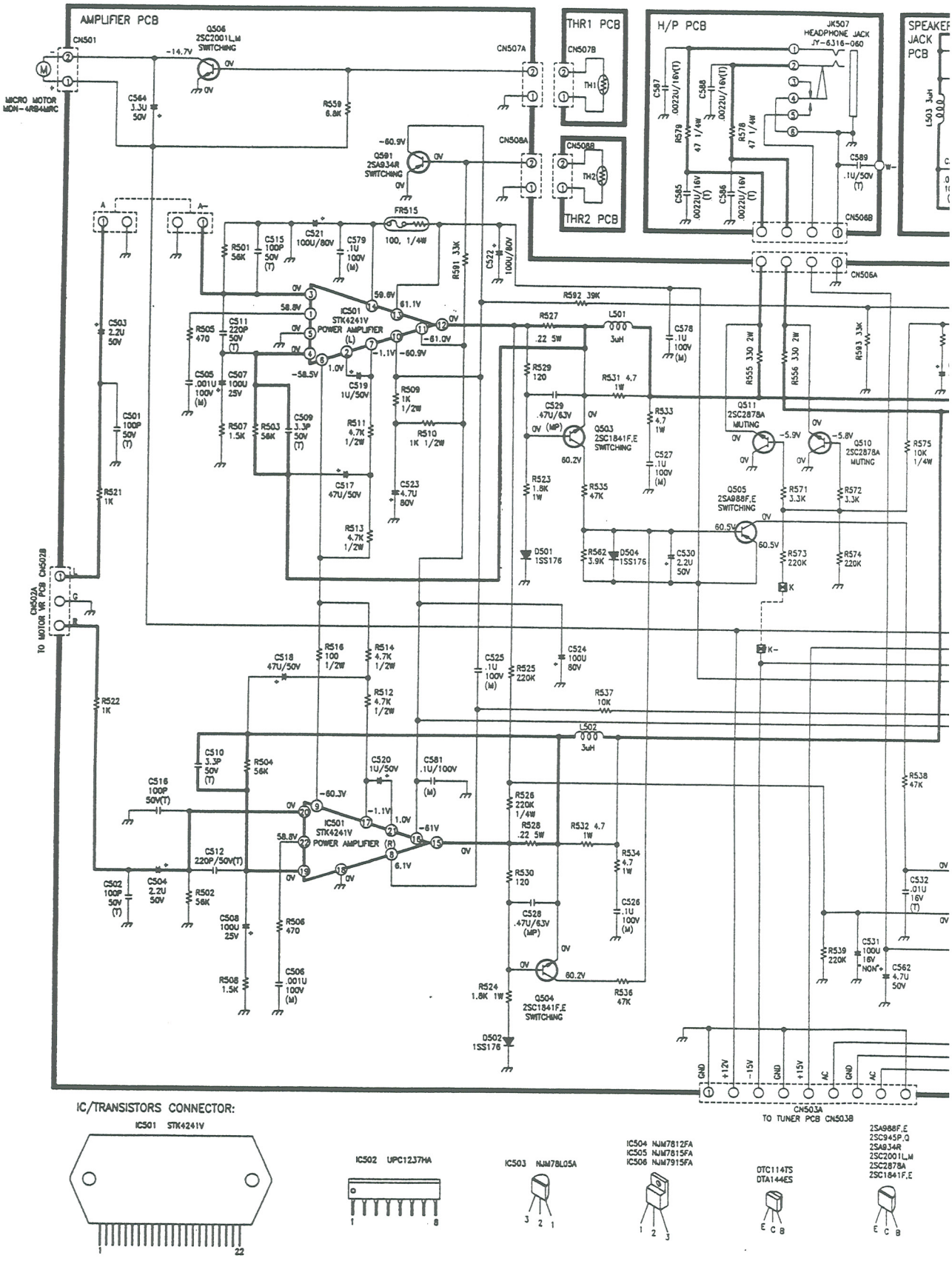


Mechanical Exploded View- Receiver

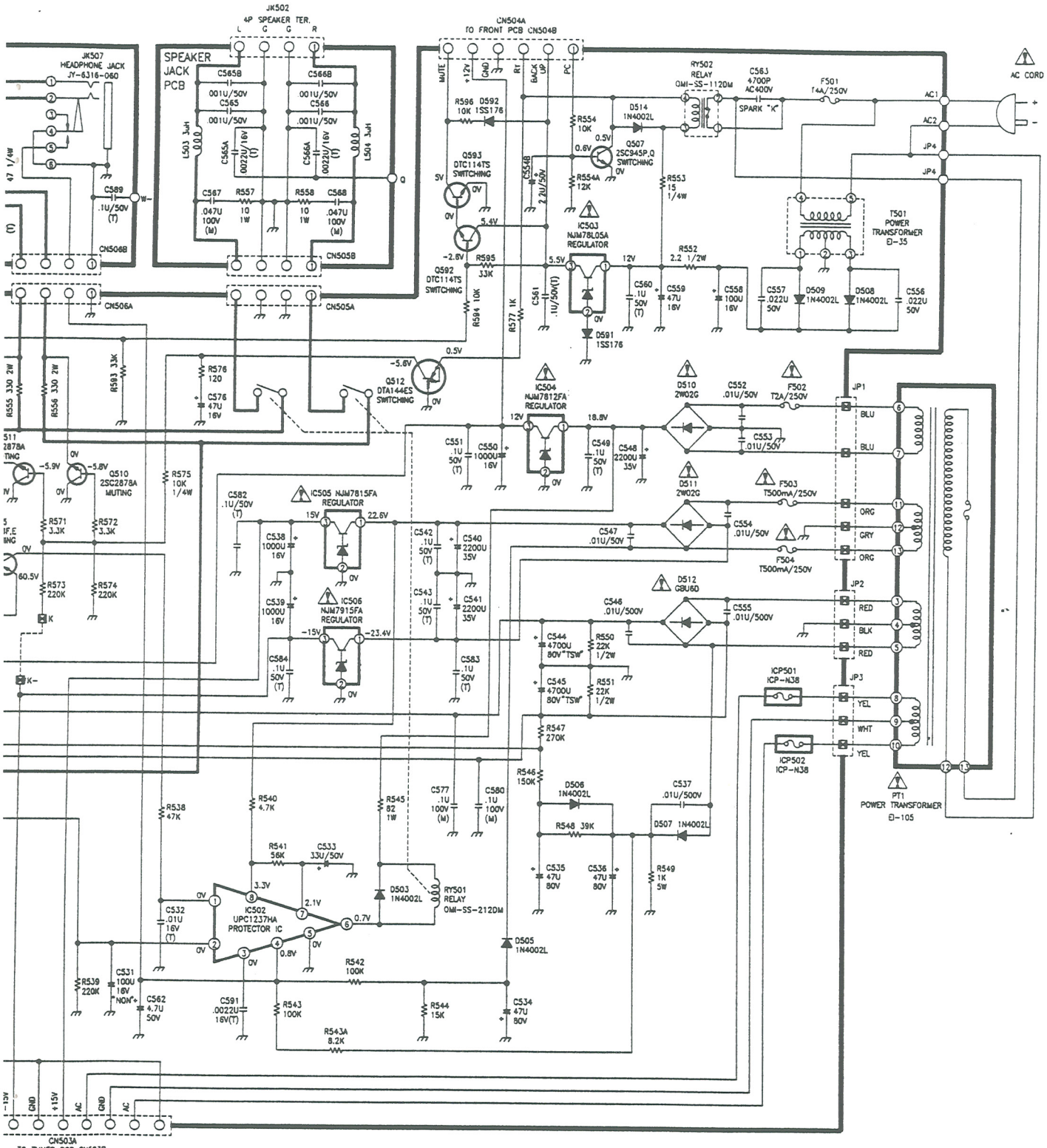


Mechanical Exploded View-Cassette



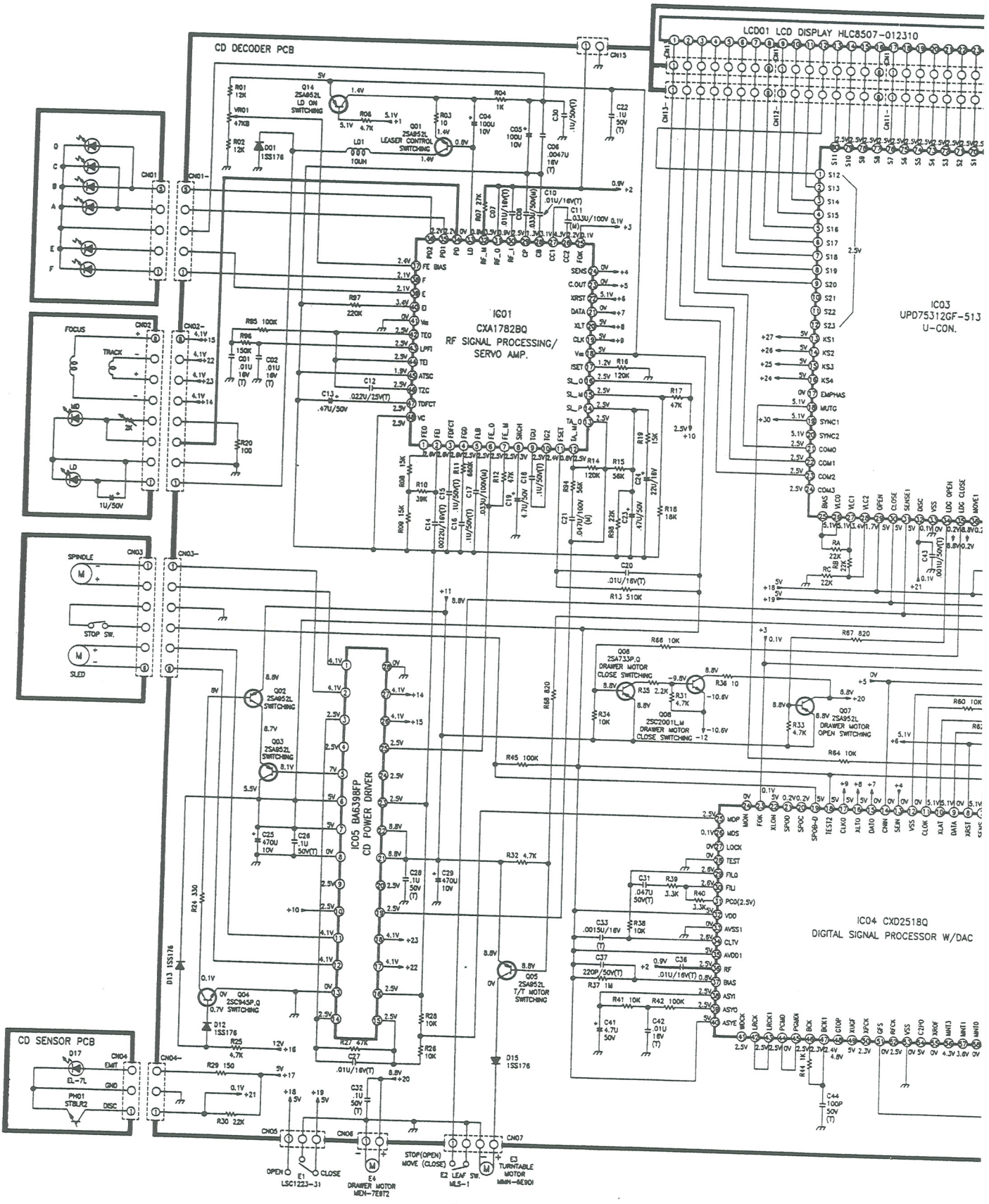

AMPLIFIER PCB
THR1 PCB
THR2 PCB
H/P PCB
SPEAKER JACK PCB
JK507 HEADPHONE JACK JY-6316-060
CN501
CN502A TO MOTOR SW PCB CN502B
CN503A TO TUNER PCB CN503B
CN506A
CN506B
CN507A
CN507B
CN508A
CN508B
MICRO MOTOR MDN-4RB4MRC
Q506 2SC2001L,M SWITCHING
Q501 2SA934R SWITCHING
Q503 2SC1841F,E SWITCHING
Q504 2SC1841F,E SWITCHING
Q505 2SA988F,E SWITCHING
Q510 2SC2878A MUTING
Q511 2SC2878A MUTING
IC501 STK4241V POWER AMPLIFIER (L)
IC501 STK4241V POWER AMPLIFIER (R)
FR515
L501 3uH
L502 3uH
D501 1SS176
D502 1SS176
D504 1SS176
TH1
TH2
GND
+12V
-15V
+15V
AC
IC/TRANSISTORS CONNECTOR:
IC501 STK4241V
IC502 UPC1237HA
IC503 NJM78L05A
IC504 NJM7812FA
IC505 NJM7815FA
IC506 NJM7915FA
OTC114TS
DTA144ES
2SA988F,E
2SC945P,Q
2SA934R
2SC2001L,M
2SC2878A
2SC1841F,E

Schematic Diagram - Amp.

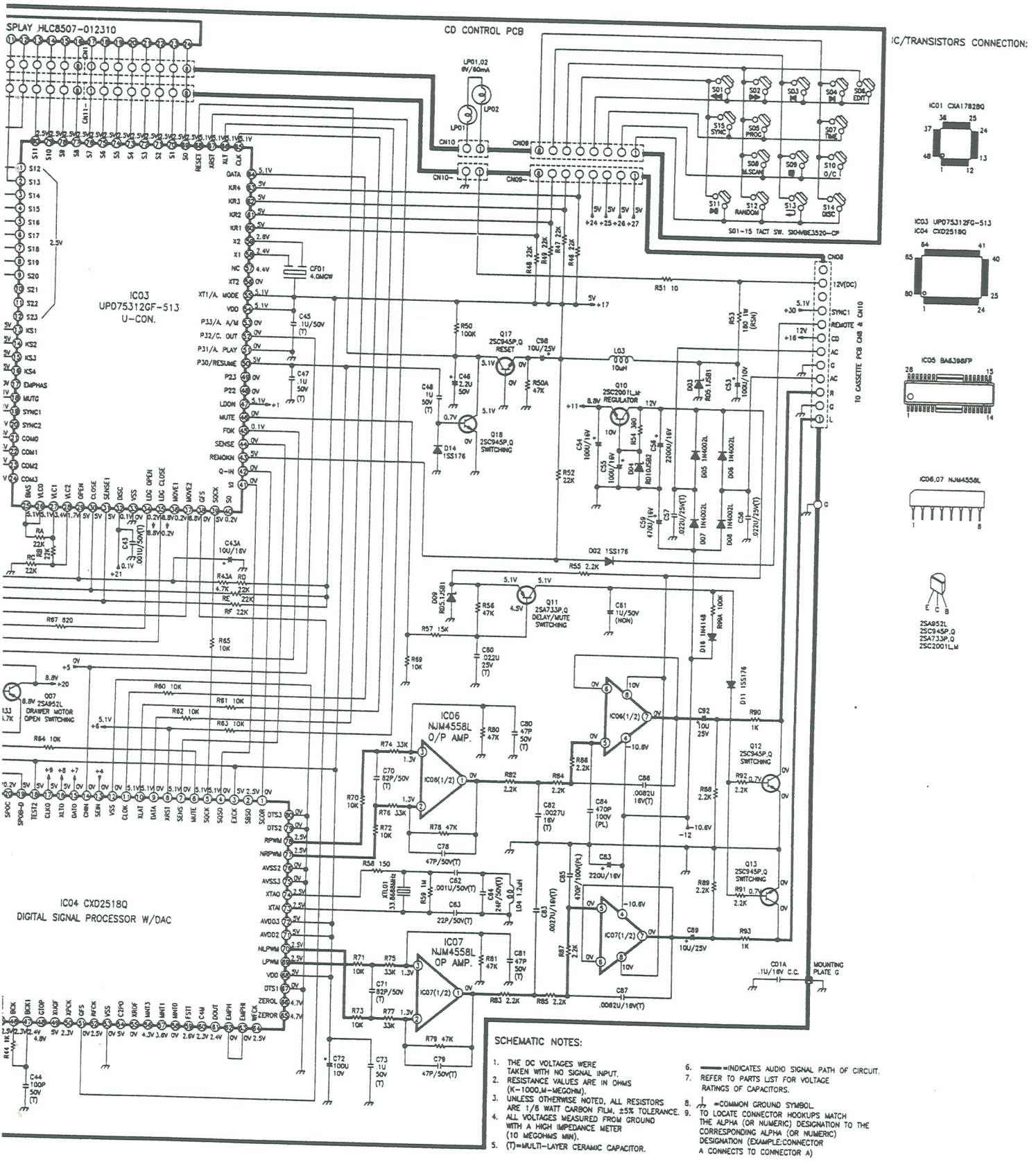


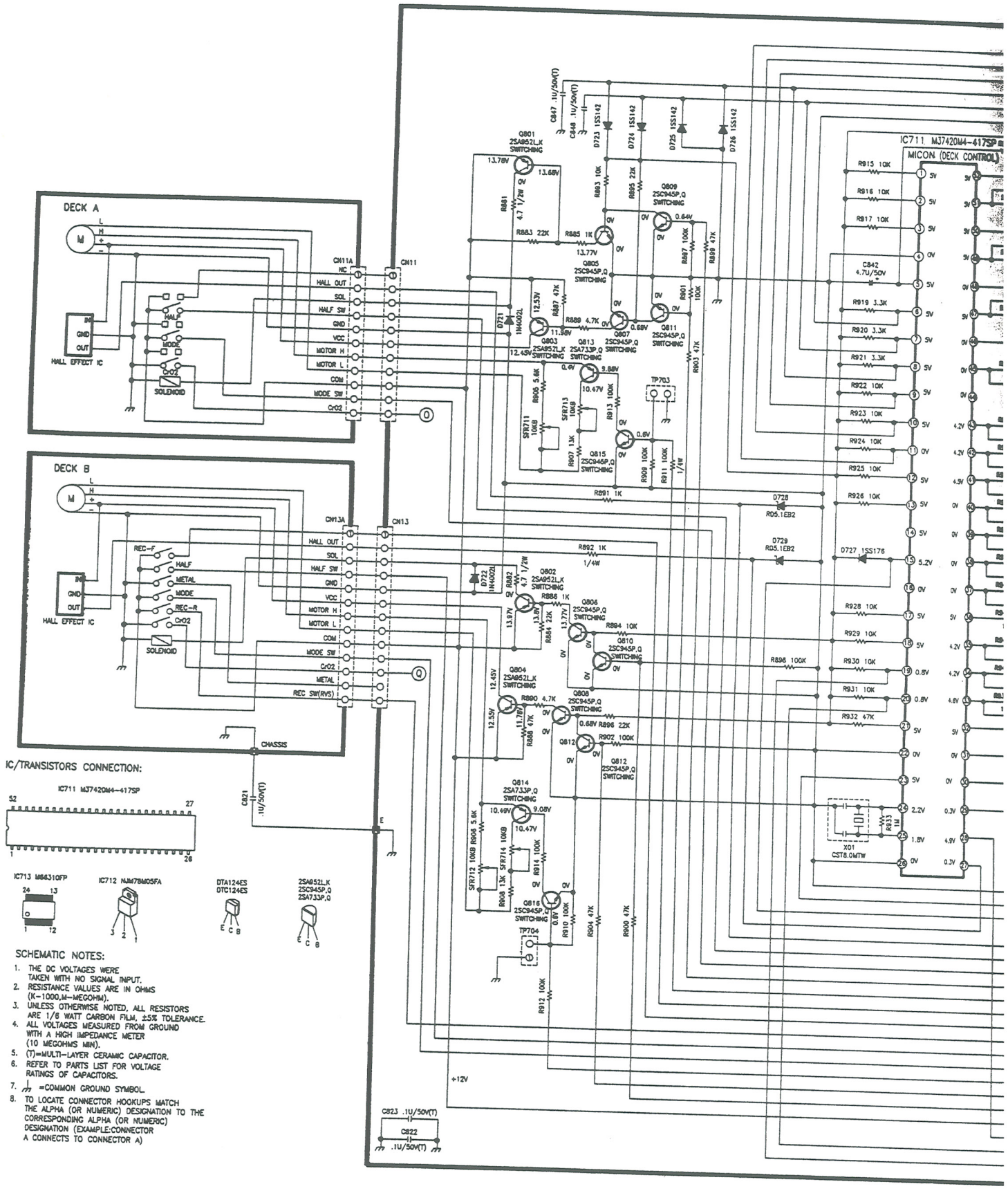
SCHEMATIC NOTES:

1. THE DC VOLTAGES WERE TAKEN WITH NO SIGNAL INPUT.
2. RESISTANCE VALUES ARE IN OHMS (K-1000,M-MEGOHM).
3. UNLESS OTHERWISE NOTED, ALL RESISTORS ARE 1/6 WATT CARBON FILM, ±5% TOLERANCE.
4. ALL VOLTAGES MEASURED FROM GROUND WITH A HIGH IMPEDANCE METER (10 MEGOHMS MIN).
5. (T)=MULTI-LAYER CERAMIC CAPACITOR.
6. REFER TO PARTS LIST FOR VOLTAGE RATINGS OF CAPACITORS.
7. ⏚ =COMMON GROUND SYMBOL.
8. ——— = INDICATES SIGNAL PATH OF CIRCUIT.
9. TO LOCATE CONNECTOR HOOKUPS MATCH THE ALPHA (OR NUMERIC) DESIGNATION TO THE CORRESPONDING ALPHA (OR NUMERIC) DESIGNATION (EXAMPLE:CONNECTOR A CONNECTS TO CONNECTOR A)


CD DECODER PCB
LCD01 LCD DISPLAY HLC8507-012310
IC01
CXA1782BQ
RF SIGNAL PROCESSING/
SERVO AMP.
IC03
UPD753I2GF-513
U-CON.
IC05 BA6398FP
CD POWER DRIVER
IC04 CXD2518Q
DIGITAL SIGNAL PROCESSOR W/DAC
CD SENSOR PCB
FOCUS
TRACK
SPINDLE
SLED
STOP SW.
LOAD OPEN
LOAD CLOSE
STOP(OPEN)
MOVE (CLOSE)
OPEN
CLOSE
E1
LSC1223-31
E2 LEAF SW.
MLS-1
E3
TURNTABLE
MOTOR
MMN-6E90I
E4
DRAWER MOTOR
MEN-7E9T2
Q01 2SA952L LEASER CONTROL SWITCHING
Q02 2SA952L SWITCHING
Q03 2SA952L SWITCHING
Q04 2SC945P,Q SWITCHING
Q05 2SA952L T/T MOTOR SWITCHING
Q06 2SA733P,Q DRAWER MOTOR CLOSE SWITCHING
Q07 2SA952L DRAWER MOTOR OPEN SWITCHING
Q08 2SC2001L,M DRAWER MOTOR CLOSE SWITCHING
Q14 2SA952L LD ON SWITCHING
D01 1SS176
D12 1SS176
D13 1SS176
D15 1SS176
D17 EL-7L
PH01 ST8ULR2

Schematic Diagram – CD





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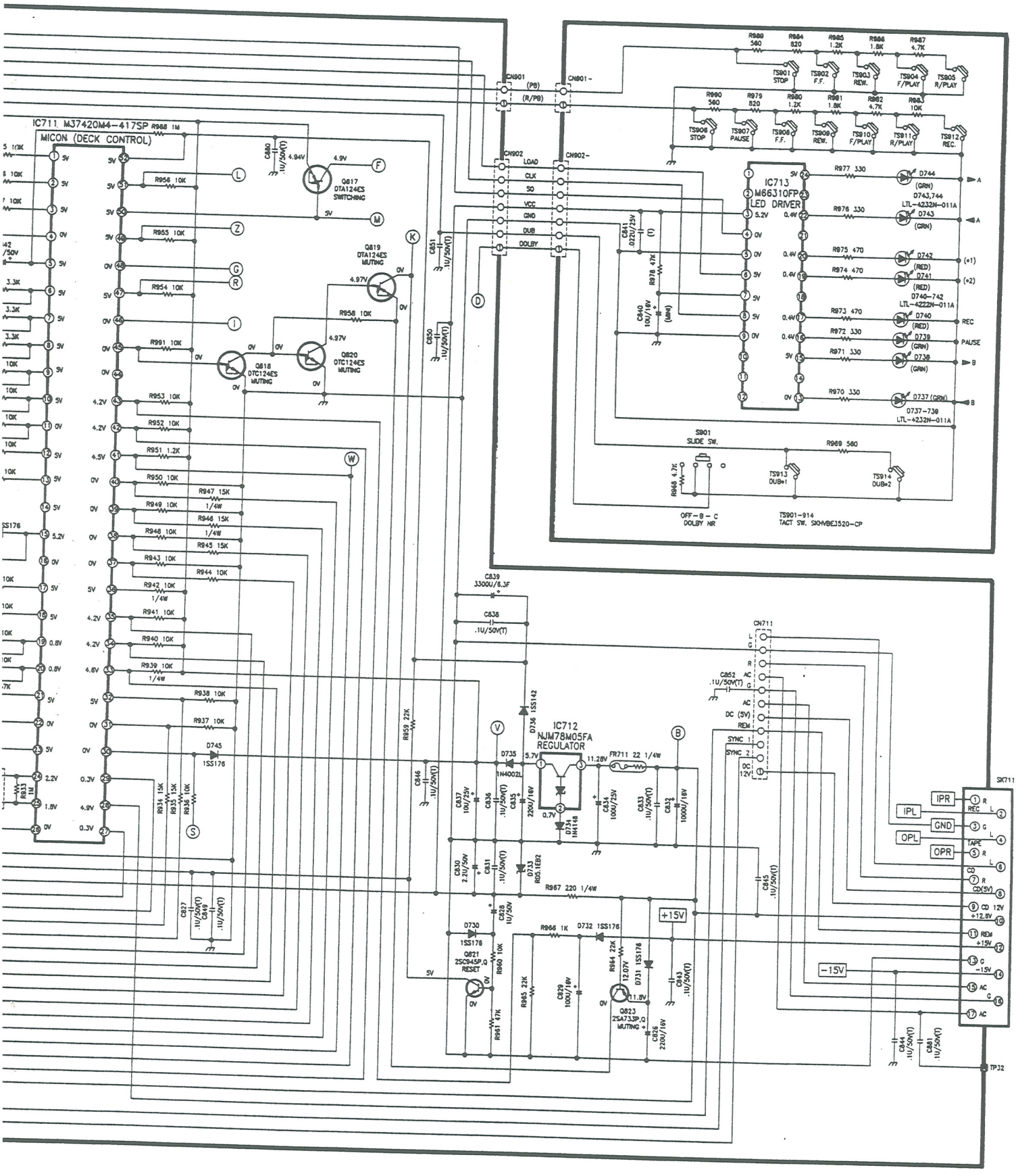
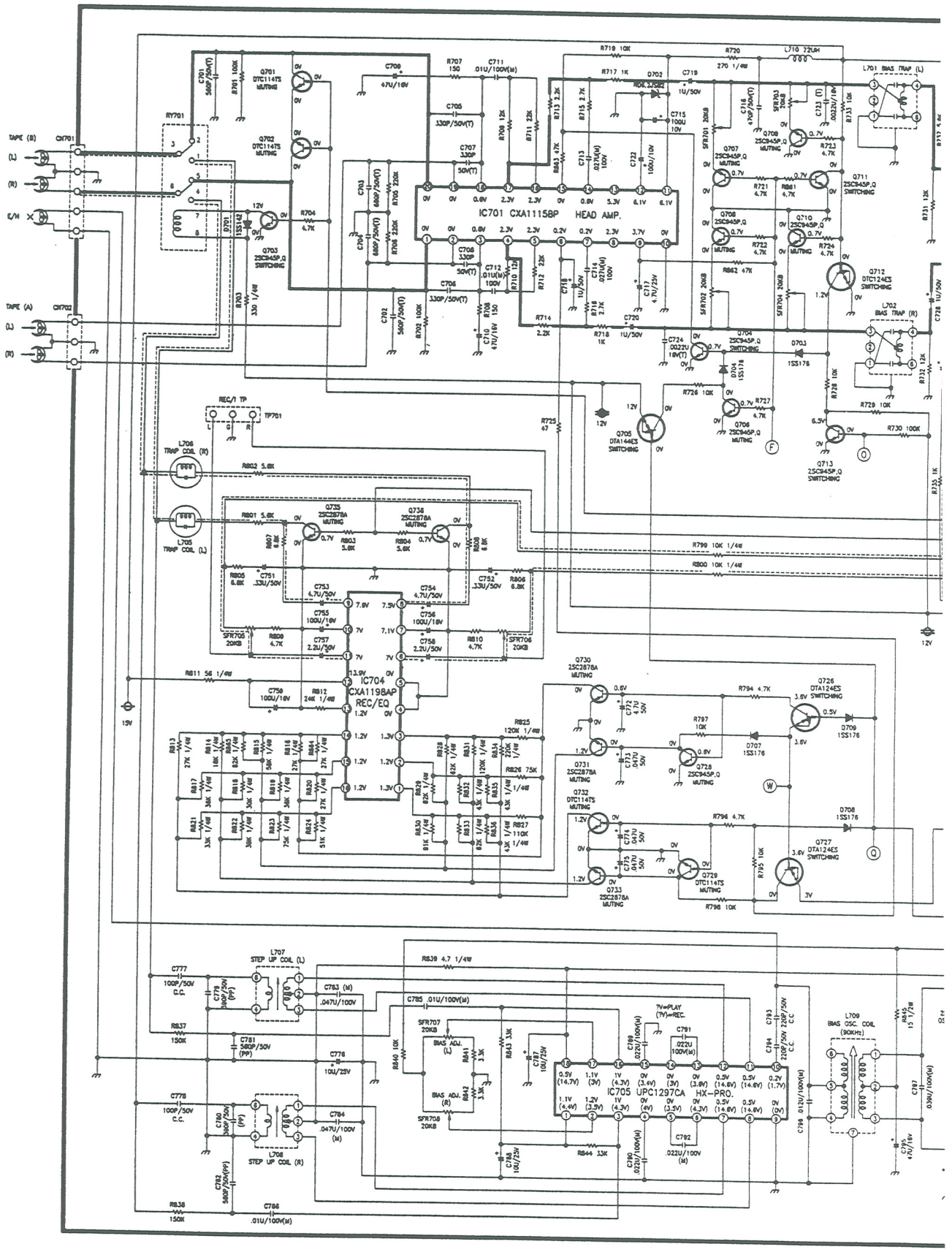
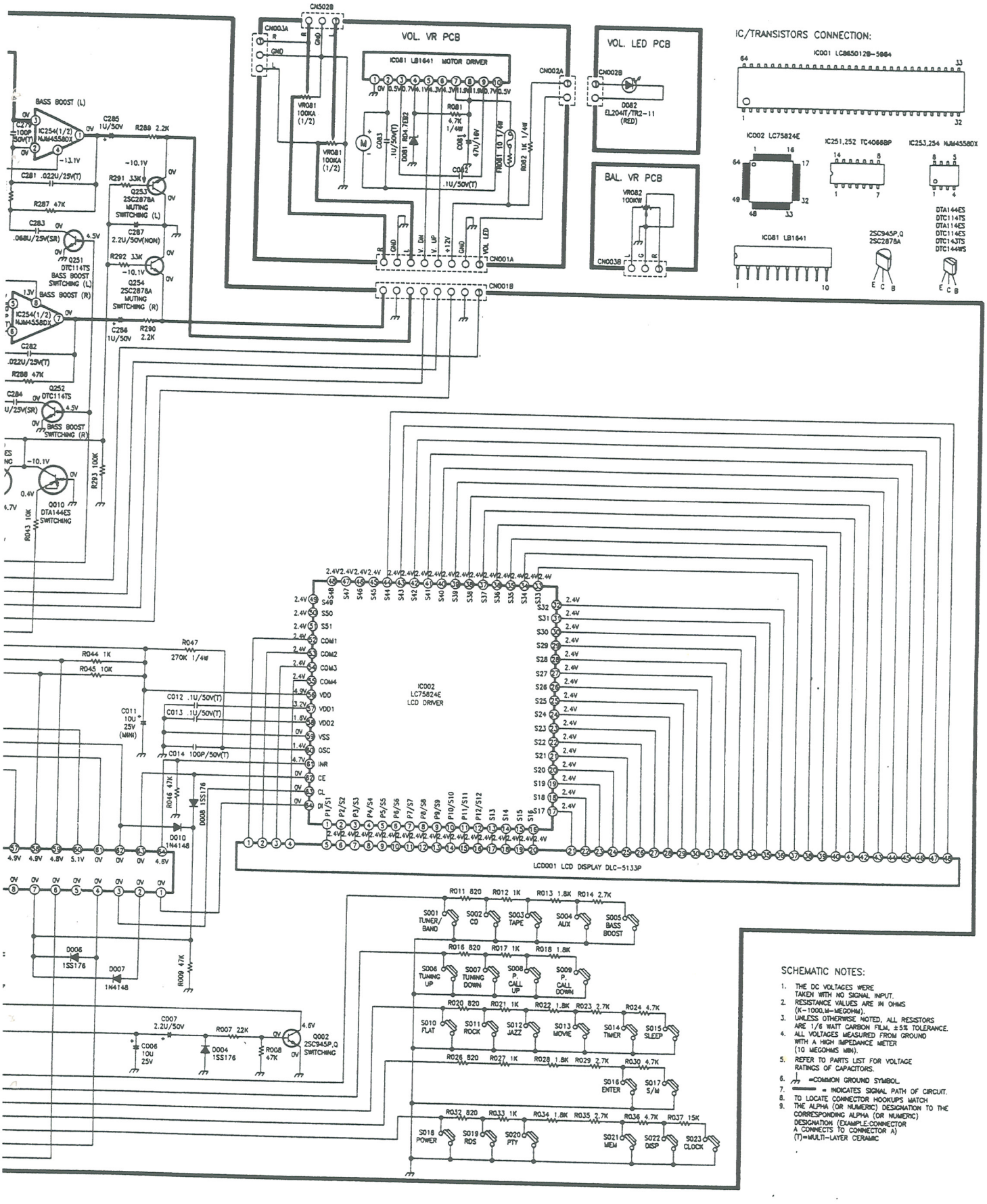
ematic Diagram– Cassette (2/2)



Schematic Diagram - Ca



Schematic Diagram- Front